

**IN THE UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF NORTH CAROLINA  
STATESVILLE DIVISION**

RAMONA WINEBARGER and REX WINEBARGER,  
Plaintiffs,

**CASE NOS. 5:15CV57-RLV;  
3:15CV211-RLV**

v.  
BOSTON SCIENTIFIC CORPORATION,  
Defendant

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MARTHA CARLSON,  
Plaintiff,

v.  
BOSTON SCIENTIFIC CORPORATION  
Defendants

**PLAINTIFFS OBJECTIONS AND COUNTER DESIGNATIONS TO DEFENDANT  
BOSTON SCIENTIFIC'S COUNTER DEPOSITION DESIGNATIONS OF  
JAMES GODDARD TAKEN MARCH 28/29, 2013**

BSC Counter Designation	Objection	Plaintiffs Counter Designation to BSC Counter Designation
jg032813, (Pages 185:19 to 188:4) 185 19 Q. That Boston Scientific feels like 20 the current specifications and design is adequate 21 to control this failure mode and the effect from 22 it, right? 23 MR. ANIELAK: Object to the form. 24 A. It's put in there to control the 186 1 design feature. So we're utilizing the product 2 spec. It indicates the mesh design feature such 3 as pore size, and that's what's being controlled		

4 here.  
5 Q. Okay. And then as far as the  
6 recommended actions to control poor tissue  
7 ingrowth which causes a failure of erosion,  
8 exposure, dehiscence and necrosis is what,  
what  
9 do they recommend as far as any  
recommended  
10 actions. None, right?  
11 A. No, the company believed that we  
12 had enough knowledge at this point based  
upon  
13 mesh design, previous use of mesh,  
published  
14 literature that this product specification  
15 characterizing the pore size was an adequate  
16 control.  
17 Q. Again, my question is, their  
18 recommended action for this failure mode  
was  
19 none, correct?  
20 A. Yes, it was none based upon the  
21 knowledge base that we had at the time.  
22 Q. Boston Scientific had the ability  
23 to develop lighter weight mesh or develop  
larger  
24 pore size mesh and market that themselves  
if they

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1 had wanted to prior to this, didn't they?  
2 MR. ANIELAK: Object to form.  
3 A. They had a knowledge base to --  
4 Q. I'm sorry.  
5 A. -- to go with a wide, a very broad  
6 design.  
7 Q. Right.  
8 A. And the mesh design that we  
9 initially chose to proceed with was Polyform.  
10 And if you look at the design of Polyform at  
the  
11 time that it was commercialized, it was a  
large  
12 pore knit mesh, it was a lightweight mesh  
13 relative to other products that were on the  
14 market, so it fit the criteria against  
published  
15 literature around these types of mesh  
implants  
16 and what has done well, what was safe and  
17 effective.

186:22-  
187:22  
FRE 403,  
Cumulative

<p>18 Q. It was the heaviest mesh as opposed</p> <p>19 to others on the market, wasn't it?</p> <p>20 A. No.</p> <p>21 Q. It wasn't?</p> <p>22 A. No.</p> <p>23 Q. It was one of the heaviest ones</p> <p>24 that was being used in prolapse kits at the time,</p> <p style="text-align: center;">188</p> <p>1 wasn't it?</p> <p>2 A. No.</p> <p>3 Q. Are you sure about that?</p> <p>4 A. Yes.</p>		
<p><b>jg032913, (Pages 481:3 to 485:4)</b></p> <p style="text-align: center;">481</p> <p>3 Q. Good afternoon, Jim. Why don't you 4 tell the jury a little bit about yourself?</p> <p>5 A. I am married living in</p> <p>6 Massachusetts here. I have two daughters and a</p> <p>7 grandchild at this point. I've been living in 8 Massachusetts for about 20 years it's been.</p> <p>9 Q. And describe your educational 10 background?</p> <p>11 A. My educational background. I have</p> <p>12 an engineering degree, specifically in plastics 13 engineering, that I completed in 1984.</p> <p>14 Q. And the plaintiffs previously 15 marked as Deposition Exhibit No. 43 a copy of a</p> <p>16 description of your work experience; is that 17 right?</p> <p>18 A. Yes.</p> <p>19 Q. Describe a little bit about what 20 your employment history is, where you've worked</p> <p>21 and what positions you've held?</p> <p>22 A. This document contains a work 23 history that spans from 1987 to present, and that</p> <p>24 basically covers the time that I've spent within</p> <p style="text-align: center;">482</p> <p>1 the medical device industry. So I started with</p> <p>2 CR Bard back in 1987, worked on various feeding</p> <p>3 products as well as angioplasty balloons, stayed</p>	<p>BSC has previously designated the same testimony. Plaintiffs adopt and incorporate any objections as set forth in their counter- designations, if any.</p>	<p><b>Plaintiffs adopt and incorporate their counter designations, if any.</b></p>

4 there for about six years, and then moved on  
to  
5 Vision Sciences which is a company that  
developed  
6 proprietary endoscope devices. In that  
regard, I  
7 worked on the disposable device that was  
8 associated with that proprietary technology.  
9 From there -- after spending about five or six  
10 years there, I went on to Eligix in which I  
was  
11 involved or managed the development of the  
12 disposables component used for that cancer  
13 therapy process, and subsequently moved on  
to  
14 Boston Scientific in 2003.  
15 Q. And I'm going to jump in there.  
16 When you started at Boston Scientific in  
2003,  
17 what division did you come into, where did  
you  
18 start working?  
19 A. I worked at the urology women's  
20 health division in Boston Scientific.  
21 Q. And what products are covered by  
22 that division, what types of research and  
23 development goes on in that division?  
24 A. There are basically for that  
483  
1 division two key types of products, pelvic  
floor  
2 repair type products, midurethral slings as  
well  
3 as pelvic organ prolapse and, also, the  
4 gynecology type product which is the system  
that  
5 treats abnormal uterine bleeding.  
6 Q. And when you started at Boston  
7 Scientific in 2003, what position were you  
hired  
8 into?  
9 A. I was hired as a senior R & D  
10 engineer.  
11 Q. And is that still your current  
12 position?  
13 A. No.  
14 Q. And what position do you have  
15 today?  
16 A. Currently I'm an R & D manager  
and  
17 have held that since 2005. In --

18 Q. Go ahead.  
19 A. In that role I'm the functional  
20 manager for R & D engineers that work on  
21 products, specifically for the pelvic floor  
22 franchise.

23 Q. So describe what the difference is  
24 between when you were the senior R & D  
engineer

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1 in 2003 to 2005 to when you became a  
manager in  
2 2005. Functionally how did your  
responsibilities  
3 change?  
4 A. Okay. As a senior R & D engineer,  
5 someone in that role would be definitely  
having  
6 more of a hands-on involvement with the  
design  
7 and development of the product, so they  
would be  
8 generating and evaluating prototypes,  
completing  
9 some of the testing or directing the  
completion  
10 of testing, generating documentation and  
that  
11 sort of thing within that product  
development  
12 cycle.

13 As a functional manager, again, I  
14 manage the engineers that are associated  
with  
15 those tasks, so I will not be so hands-on but  
16 provide guidance around those activities and  
17 basically prioritize some of their activities as  
18 well.

19 Q. And when did your role change  
from  
20 being the more hands-on engineer on  
projects to  
21 being more in a management role, when did  
that  
22 transition occur?  
23 A. About the same time that I  
received  
24 that title which was 2005.

485

1 Q. How many -- approximately how  
many

<p>2 engineers do you manage in your research and 3 development group? 4 A. Currently six.</p>		
<p>jg032913, (Pages 487:16 to 488:7) 487</p> <p>16 Q. When Boston Scientific puts a team 17 together to develop a new product, why does it 18 involve -- why does it get a cross-functional 19 team in place, what is the purpose of that? 20 A. Well, the R &amp; D group does not 21 possess all the knowledge and the skills to be 22 able to develop these products, so we really need 23 to be able to utilize that type of knowledge and 24 information and have that type of input to bring</p> <p>488</p> <p>1 these products to market. 2 Q. And when you say these products, 3 would that -- cross-functional teams, would they 4 be put in place for the R &amp; D efforts 5 consistently across product development in your 6 experience? 7 A. Yes.</p>	<p>BSC has previously designated the same testimony. Plaintiffs adopt and incorporate any objections as set forth in their counter-designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>
<p>jg032913, (Pages 488:13 to 495:2) 488</p> <p>13 Q. I want to talk about POP or pelvic 14 organ prolapse. In general, what is your 15 understanding of that condition? 16 A. That's a condition where through 17 childbirth and other potential causes there is 18 some connective tissue that is no longer holding 19 the pelvic organs in place satisfactorily, and 20 the devices that we have developed provide the 21 physician with an option for treating that type 22 of condition? 23 Q. And at Boston Scientific what 24 devices have you been involved with the research</p> <p>489</p> <p>1 and development efforts of that have ultimately 2 become commercialized?</p>	<p>BSC has previously designated the same testimony. Plaintiffs adopt and incorporate any objections as set forth in their counter-designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

3       A. That would include the Pinnacle  
and

4       **Uphold devices.**

5       Q. I want to talk generally about the  
6 process of research and development of a  
new

7 product like the slings or the treatments, the  
8 devices for pelvic organ prolapse. In general  
9 what are the steps to bring a product  
through the

10 research and development process?

11       A. There's a very thorough process,  
12 and at a high level we collect input to help  
13 design or define what that design should be,  
then

14 verify that design and ultimately validate,  
and

15 in collecting that input per se, we're working  
16 closely with physicians, and specifically with  
17 Solyx and the Pinnacle and Uphold, these  
were

18 products that were brought in to BSC as far  
as an

19 idea, a design that these physicians had in  
mind.

20 So Dr. Mamo brought to us that Solyx idea.  
The

21 Uphold product was something that Dr.  
Goldberg

22 had developed on his own, in looking at a  
way to

23 create a mesh shape that would work best  
for a

24 hysteropexy procedure, and Dr. Miller  
brought

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1 forth an idea around the placement of the  
arms of

2 the mesh profile in the sacrospinous  
ligament.

3           So in those products or programs,  
4 we worked closely with those physicians to  
5 further develop that idea, and we also  
brought in

6 multiple other physicians to also take a look  
at

7 how we were approaching this, just to  
confirm

8 that we were hearing from these one or --  
you

9 know, one physician that brought the idea  
that  
10 that makes sense, and the way we proceed  
with  
11 that is through bioskills labs, which are  
working  
12 with cadavers basically, and our frequency  
in  
13 doing that would happen almost once a  
month or so  
14 to iterate that process. So a lot of that  
15 information goes into the input documents,  
if you  
16 will. We create a market specification, a  
17 product specification. We start our risk  
18 management aspects of it. So we look at if  
we're  
19 moving toward this design what potential  
failures  
20 could occur. So we start assessing that early  
on  
21 to make sure that we put the controls in  
place to  
22 minimize the risk associated with that.  
23 Q. You described one of the initial  
24 stages of product development for the slings  
that

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1 we talked about or the pelvic floor prolapse  
2 repair kits is the inputs or specification stage.  
3 What is that? What happens at that  
particular  
4 stage of R & D?  
5 A. That's where we're taking the voice  
6 of the customer information which ends up  
in  
7 our -- we create a market specification  
around  
8 that. So that's listening to customers to  
9 understand what kind of features they're  
looking  
10 for in a kit such as this. From an R & D  
11 perspective we then take that more  
generalized  
12 terms that are inserted into a market spec  
and  
13 translate them to more engineering terms, so  
14 dimensions or strengths and things like that  
or  
15 specifically calling out the biocompatibility  
16 testing that needs to be done.

17 Q. You mentioned certain doctors like  
18 Dr. Mamo or Dr. Miller or Dr. Goldberg  
with  
19 respect to Solyx, Pinnacle and Uphold  
20 respectively. Are there other doctors that  
were  
21 involved with those products at the  
22 specification, at the very early stages about  
23 what the designs of the products might look  
like?

24 A. Yes, absolutely. So we -- as I  
492  
1 mentioned, we begin the bioskills lab very  
early  
2 on. At that point we're bringing in multiple  
3 physicians to give us feedback.

4 Q. What is the next stage? After  
5 you've obtained feedback and gathered  
information  
6 from doctors about what the product  
7 specifications might look like, what's the next  
8 phase of research and development at Boston  
9 Scientific?

10 A. Basically at that point we're  
11 looking to take that input document and  
derive a  
12 design, a finalized design on that, and we  
call  
13 that phase basically freezing the design. We  
do  
14 some initial testing and show that, yes, we  
have  
15 pretty good confidence that we'll meet the  
16 product spec requirements that we put in  
place.  
17 Subsequent to that we're into the  
verification  
18 phase of the design, so we build product and  
we  
19 do the testing, the biocompatibility testing,  
the  
20 general performance testing, which could be  
21 tensile testing to see how strong things are,  
the  
22 flexibility, those types of mechanical testings  
23 to characterize and make sure that, again,  
we're  
24 building a product that meets the  
specifications

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1 that were generated based upon physician  
input.  
2 So it's a connective process to make sure that  
3 all that information is brought through.  
4 And then once we get through the  
5 verification process, we go back to the  
basically  
6 upfront again, and we say, okay, we've built  
this  
7 product, and we're putting it back in the  
hands  
8 of physicians, and we're asking them to come  
in,  
9 work with us, again in the similar-to-use  
10 environment, the cadavers, to take this  
product  
11 that we're pretty close to getting ready to  
12 commercialize. We've completed all our  
13 verification testing, we have our designs  
14 completed, please give us the final feedback  
that  
15 you can confirm that we're hitting the mark  
here.  
16 Q. And the bioskills labs are -- who  
17 would attend those, who generally goes to  
those  
18 bioskills lab?  
19 A. It is the people that are on the  
20 project team will be working closely with the  
21 physician, so there's typically a number of  
22 physicians that come and place the mesh  
product.  
23 Q. And in terms of getting medical  
and  
24 clinical feedback, how does that happen at  
these

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1 stages of research and development, how are  
you  
2 collecting their input?  
3 A. Their input? Through just  
4 discussions and questions around the  
procedure  
5 and the cadaver labs, but we're also putting  
in  
6 front of them what we propose for directions  
for  
7 use.  
8 So we're asking them about the  
9 procedure. This is what we see as the  
potential

<p>10 effects and complications. This is what we're</p> <p>11 seeing based upon your initial input on the 12 procedure steps. Does this make sense, are we</p> <p>13 capturing everything, just to be sure that we're</p> <p>14 having -- putting forth all the information 15 needed in that DFU.</p> <p>16 Q. And what is the final stage of R &amp; 17 D to bring a product like Uphold or Pinnacle to</p> <p>18 market, what's the final stage?</p> <p>19 A. The final stage is to ensure that 20 all the processing, the manufacturing, that shows</p> <p>21 capability; the design validation is in place; 22 and then basically, again, we do a very thorough</p> <p>23 paperwork exercise of documenting all of this,</p> <p>24 and we need to make sure that that is there, the</p> <p style="text-align: center;">495</p> <p>1 regulatory clearance is in place for whatever 2 region of the world we're distributing it.</p>		
<p>jg032913, (Pages 496:18 to 502:16)</p> <p style="text-align: center;">496</p> <p>18 Q. I want to talk a little bit about 19 Pinnacle now. You mentioned that Dr. Miller was</p> <p>20 originally involved with the idea behind the 21 Pinnacle product. Describe for me who Dr. Miller</p> <p>22 is and how he was involved initially?</p> <p>23 A. Dr. Miller is a urogynecologist out 24 of -- practicing in Wisconsin, and again, he came</p> <p style="text-align: center;">497</p> <p>1 to Boston Scientific with an idea in mind about a</p> <p>2 way to basically fixate the mesh in the anatomy.</p> <p>3 The sacrospinous ligament was something that was</p> <p>4 already being used as an anchoring point, a</p> <p>5 suturing point for these types of products. The</p> <p>6 tie-down suture potentially is not necessarily</p> <p>7 the best. It could lead to pain and such. So he</p>	<p>496:18- 502:16 FRE 403</p>	

8 had an idea of why not bring the mesh  
through the  
9 sacrospinous ligament as a fixation point,  
and he  
10 was well aware of our Capio device and saw  
that  
11 the two could work together to create a  
12 differentiated product, in the sense that to  
move  
13 away from the trocar based, again multiple  
14 incision-based products, such as Prolift and  
15 Apogee, Perigee and Bard's Avaulta which  
were out  
16 in the market.  
17 Q. So describe for me that in a little  
18 bit more detail. What was the idea behind  
19 Pinnacle as opposed to the trocar-based  
systems  
20 that were on the market?  
21 A. With the Pinnacle device -- I  
22 should back up and say with the trocar-  
based  
23 products that were out on the market, the  
24 physician is not only making an incision  
498  
1 vaginally but also having to come from skin  
2 incisions elsewhere on the body to come in  
around  
3 and basically place this mesh product with  
the --  
4 and these are blind trocar passages. With  
the  
5 Capio device, the physician is only making a  
6 single incision in the vaginal wall, whether it  
7 be the anterior side or the posterior, and  
8 completing his dissection and using the  
Capio to  
9 get to those fixating points without the use of  
10 the blind trocar passages.  
11 Q. You mentioned that there were two  
12 products that were being brought together  
to form  
13 Pinnacle. What do you mean when you say  
there  
14 was two products that were being brought  
15 together?  
16 A. As I mentioned, the Capio device  
17 was something that these types of  
physicians,  
18 urogynecologists, gynecologists and  
urologists,

19 were already using for their pelvic surgery,  
and  
20 prior to the development of the Pinnacle and  
21 Uphold products, the Polyform mesh sold in  
the  
22 sheet form had already been commercialized  
and  
23 had been on the market for a little while. So  
we  
24 basically took those two technologies to be  
able

499

1 to provide something that would be utilized  
in  
2 the Capio and provide a single incision  
approach  
3 along with a precut mesh shape?  
4 Q. So the Polyform mesh that was  
being  
5 used, ultimately that was used in Pinnacle  
and  
6 Uphold, was already on the market and  
being  
7 commercialized at the research and  
development  
8 stage for Pinnacle and Uphold?

9 A. Yes.  
10 Q. Did Dr. Miller remain involved  
11 through the R & D process with Boston  
Scientific?

12 A. Yes, he did.  
13 Q. And were there other doctors  
14 besides Dr. Miller that were also involved in  
the  
15 research and development efforts of the  
Pinnacle  
16 device?

17 A. Yes, yes.  
18 Q. And how would those doctors be  
19 involved? How would Boston Scientific  
obtain  
20 their feedback and their input?

21 A. They were brought in. As we  
22 produced prototypes to look at different  
ideas  
23 and features, we brought physicians in to  
use  
24 them in the cadaver scenario. So we were  
looking

500

1 to find out what would be the best approach  
of  
2 delivering this product in the mesh, so the  
3 physicians provided us feedback as to, you  
know,  
4 is it passing through the ligament correctly.  
5 Once it's placed, do they see that it's placed  
6 correctly, it's laying correctly. Those types  
of  
7 things. Is the shape generally where they  
would  
8 expect or want to see it.  
9 Q. How often do you have those types  
10 of bioskills labs, those cadaver labs during  
the  
11 development process? How frequently are  
you  
12 having those?  
13 A. When we're heavily focussed on  
that  
14 part of it, during that, it's probably about  
once  
15 a month, so that gives us the chance to, you  
16 know, have that time with the physicians,  
get  
17 that feedback and then iterate. So we have a  
few  
18 weeks to iterate, make some new prototypes,  
get  
19 some physicians back in again, a new look at  
the  
20 changes that we're making.  
21 Q. When you use the term iterate,  
what  
22 does that mean?  
23 A. So basically we would adjust the  
24 design based upon the feedback from the  
501  
1 physicians.  
2 Q. So you may have a bioskills lab  
3 where doctors would come in and use a  
prototype,  
4 and based on their feedback, you may make  
changes  
5 or iterate to the next version?  
6 A. Yes.  
7 Q. For Pinnacle to get through the  
8 input stage, the verification stage, ultimately  
9 get validated and all of the testing and  
10 biocompatibility testing that you mentioned,  
as

11 well as all the bioskills lab and the doctor  
 12 feedback and the host of other  
 requirements, how  
 13 long does that take to get through that R &  
 D  
 14 process generally, or in Pinnacle how long  
 did it  
 15 take?  
 16 A. About two and a half, three years.  
 17 Q. And why does it take that long?  
 18 Why does it take two and a half to three  
 years to  
 19 get a pelvic floor product from the idea stage  
 on  
 20 to the market?  
 21 A. There are basically a lot of  
 22 knowledge gaps to be filled. So we get some  
 23 information upfront, we assess it, you know,  
 is  
 24 this something that we're capable of doing,  
 does

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1 it make sense, is it going to offer the patient  
 2 with some value, and then we -- there's just a  
 3 lot of information that we need to collect to  
 4 show that this design is going to be the  
 correct  
 5 design, and based upon that physician input,  
 be  
 6 what they are looking for. So we -- again,  
 going  
 7 through those steps is just time-consuming to  
 get  
 8 there. The testing is not short per se. We  
 also  
 9 do shelf-life testing which has a certain time  
 10 period to get completed, so it's not  
 something  
 11 that can be turned around in a month or  
 two.  
 12 Q. All of that work with doctors and  
 13 the testing and the shelf-life testing, all that  
 14 is being done to come up with a safe and  
 15 effective device?  
 16 A. Correct. Absolutely, yes.

jg032913, (Pages 502:17 to 507:1)

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17 Q. I want to talk about Uphold now.  
 18 You mentioned Dr. Goldberg was involved  
 with the

BSC has previously designated the same testimony. Plaintiffs

Plaintiffs adopt and incorporate their counter designations, if any.

<p>19 Uphold device. Who is Dr. Goldberg and how was</p> <p>20 he involved with that device?</p> <p>21 A. Dr. Goldberg is a urogynecologist</p> <p>22 out of Chicago, and he had been using our</p> <p>23 Repliform product in developing a</p> <p>hysteropexy</p> <p>24 procedure and subsequently did some</p> <p>procedures</p> <p style="text-align: center;">503</p> <p>1 with Polyform as well, and he basically came to</p> <p>2 Boston Scientific with this proposed mesh shape</p> <p>3 using either Repliform or Polyform as a potential</p> <p>4 kit where a physician could achieve apical 5 support, basically holding up those organs, but</p> <p>6 also for uterine preservation where a 7 hysterectomy may not need to be done.</p> <p>8 Q. So what was the need that</p> <p>9 Dr. Goldberg was trying to satisfy with his idea</p> <p>10 on Uphold?</p> <p>11 A. He was looking to be able to do the 12 repair but maintain the uterus in position.</p> <p>13 Q. And what advantages did Uphold have</p> <p>14 based to -- strike that.</p> <p>15 What advantages did Uphold have 16 compared to the trocar-based systems that were on</p> <p>17 the market prior to that?</p> <p>18 A. The Uphold product also utilized</p> <p>19 the Capio device. So the single incision</p> <p>20 approach was able to be achieved, no blind trocar</p> <p>21 passage, plus the Uphold basically had mesh only</p> <p>22 where it was needed, so it was a smaller mesh</p> <p>23 footprint or amount of mesh that's implanted.</p> <p>24 Q. Why did Boston Scientific pursue 504</p> <p>1 both Pinnacle and Uphold? What was the reasoning</p> <p>2 behind having two different options available?</p> <p>3 A. The Uphold, again, allows a</p>	<p>adopt and incorporate any objections as set forth in their counter- designations, if any.</p>	
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4 physician to really minimize the amount of mesh.

5 The anterior apical is a broader area of mesh to

6 be able to support some defects in the other areas where the Uphold may not cover.

7 Q. Was Dr. -- strike that. Was

8 Dr. Goldberg involved with the R & D efforts

9 after he came to the company with the idea?

10 A. Yes.

11 Q. How so?

12 A. He was involved with bioskills labs

13 as we progressed through that design iteration.

14 Q. And were other doctors besides

15 Dr. Goldberg brought into the research and

16 development process to give their input and

17 feedback as well?

18 A. Yes.

19 Q. And how did that happen?

20 A. That was -- typically in these

21 bioskills labs we would have more than one

22 physician come, so there would be multiple

23 physicians potentially that would take a look at

505

1 the design, provide us with their feedback, and

2 we would iterate based upon that.

3 Again, our desire to have multiple

4 physicians was to verify this direction that

5 Dr. Goldberg suggested we go off in and to make

6 sense it's going to be a solid option for them to

7 use in this procedure.

8 Q. How long did the R & D efforts take

9 for Uphold from around the time when Dr. Goldberg

10 came to the company with the idea until

11 ultimately it reached the market?

12 A. About three years.

13 Q. You mentioned that there were other

14 devices on the market to treat pelvic organ

15 prolapse, mesh products, prior to the

16 commercialization of Pinnacle and Uphold. How

17 did those other products on the market impact

<p>18 Boston Scientific's development into Pinnacle and 19 Uphold?</p> <p>20 A. We evaluate that in a number of 21 areas. We purchase those products from an R &amp; D</p> <p>22 perspective and get an understanding of the 23 design features associated with that, so the 24 dimensions on the delivery devices, the mesh 506</p> <p>1 configuration, the mesh material, the mesh shape.</p> <p>2 We also look at, as a team, look at the published</p> <p>3 literature that's been out -- that's out there on</p> <p>4 these previously marketed devices. The MAUDE</p> <p>5 database type of information is also collected by</p> <p>6 team members to look at what type of feedback may</p> <p>7 be collected there.</p> <p>8 Q. I want to talk a little bit about 9 biocompatibility. What does biocompatibility</p> <p>10 mean, what is your understanding of that?</p> <p>11 A. My understanding of 12 biocompatibility is really a test or an 13 assessment of how a material affects tissue.</p> <p>14 Q. And did Boston Scientific evaluate 15 the biocompatibility of the mesh contained in its</p> <p>16 Pinnacle and Uphold devices?</p> <p>17 A. Yes, there are industry standards 18 that are widely recognized that lay out specific</p> <p>19 tests to be completed based upon how a device is</p> <p>20 being used.</p> <p>21 Q. And did Boston Scientific conduct 22 tests to determine biocompatibility of its mesh</p> <p>23 used in Pinnacle and Uphold?</p> <p>24 A. Yes, there's multiple tests that 507</p> <p>1 are done.</p>		
<p>jg032913, (Page 507:4 to 507:9) 507</p> <p>4 What did Boston Scientific</p>	<p>BSC has previously designated the same</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

<p>5 ultimately conclude about the biocompatibility of 6 the mesh used in the Uphold and Pinnacle devices? 7 A. These materials were found to be 8 biocompatibility based upon the test acceptance 9 criteria.</p>	<p>testimony. Plaintiffs adopt and incorporate any objections as set forth in their counter- designations, if any.</p>	
<p>jg032913, (Pages 507:11 to 508:8) 507 11 What is the material that's used 12 for the mesh that's in Pinnacle and Uphold? 13 A. Polypropylene. 14 Q. Do you believe that's an 15 appropriate choice for Boston Scientific's mesh 16 devices? 17 A. Yes. 18 Q. Why, why do you believe that's an 19 appropriate material? 20 A. It is a material that has a long 21 history of use not only in many medical devices 22 but also for implanted products or implanted 23 materials. So it's been in the hernia market. 24 There are polypropylene sutures that have been 508 1 around a number of years as well. And then the 2 predicate vaginal meshes were of polypropylene 3 for the most part. So we decided that there's a 4 body of evidence to suggest that that would be an 5 appropriate material. We did our own testing to 6 basically confirm that aspect, and that's, you 7 know, what supports its use for safety and 8 efficacy.</p>	<p>BSC has previously designated the same testimony. Plaintiffs adopt and incorporate any objections as set forth in their counter- designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>
<p>jg032913, (Pages 512:12 to 513:15) 512 12 (Exhibit No. 70 was marked 13 for identification.) 14 Q. (By Mr. Anielak) I've marked as</p>		

<p>15 Deposition Exhibit No. 70 a meeting request;  is  16 that right?  17 A. Yes.  18 Q. And if you look at what we call the  Bates numbers down in the bottom corner --  20 A. Mm-hmm.  21 Q. -- you can see that the Bates  number for the meeting request ends in  8803. Do  23 you see that?  24 A. Yes.  513</p> <p>1 Q. And Exhibit No. 51, the agenda, is  2 basically the next Bates number in that  order,  3 right --  4 A. Yes.  5 Q. -- 804. And according to the  6 meeting request that is the document right  before  7 the agenda, when did the meeting occur that  the  8 agenda is a reference to?  9 A. This indicates here the start was  10 on April 6, 2010.  11 Q. So the agenda did not relate to any  12 type of meeting that occurred in 2008 as  13 represented by the plaintiffs' lawyer did it?  14 MR. MOODY: Objection to form.  15 A. That's correct.</p>	<p>513:11-15  Foundation,  FRE 403</p>	
<p>jg032913, (Pages 518:12 to 523:16)  518</p> <p>12 Q. (By Mr. Anielak) Exhibits 52 and 53  13 reflect some discussions that Boston  Scientific  14 had with Proxy in November of 2008. Do  you  15 remember that discussion from yesterday?  16 A. I do.  17 Q. At the time that Boston Scientific  18 was having these discussions with Proxy,  were  19 Pinnacle and Uphold on the market?  20 A. Yes, they were.  21 Q. In terms of the development of the  Lite mesh, that timeline, where were these  23 discussions on that timeline of the research  and  24 development into Lite mesh?</p> <p>519</p>		

1       A. These were discussing prototypes,  
2   so early samples that Proxy was supplying to  
us  
3   to get some feedback on our thoughts on that  
4   particular design. So these were initial  
samples  
5   which were then modified to change  
properties  
6   here and there based upon some feedback we  
7   provided them, so it's very beginning. We  
were  
8   just starting the process of looking at this  
9   alternate, and then it wouldn't -- it followed  
up  
10   with a full scale program to incorporate this  
11   mesh material into our pelvic floor repair  
kit.  
12           So as I described earlier, this  
13   product would go through the same  
sequence of  
14   events in collecting information from  
physicians,  
15   taking these prototypes, putting them in  
their  
16   hands, getting feedback on, you know, is this  
17   performing the same way or as you would  
expect it  
18   to, developing the design specifications,  
going  
19   through the verification process of testing it  
20   through biocompatibility, through other  
21   performance criteria, functional testing. We  
22   completed a regulatory submission for this  
23   product. We needed to go through the  
validation  
24   which, again, bringing physicians in to take  
a

520

1   look at that final design and confirm that this  
2   is what they would -- that they gave us a final  
3   blessing that it was the product that they  
would

4   expect to see.

5       Q. Did Boston Scientific  
commercialize  
6   and market the Lite product that was  
discussed in  
7   these documents in 2008?

8       A. Not domestically, no.

9       Q. Okay. Did Boston Scientific --  
10      A. Not international either. I'm

<p>11 sorry.</p> <p>12 Q. That's all right. Did Boston</p> <p>13 Scientific market in the United States the</p> <p>Lite</p> <p>14 product in 2009?</p> <p>15 A. No.</p> <p>16 Q. Did Boston Scientific market the</p> <p>17 Lite product in 2010?</p> <p>18 A. No.</p> <p>19 Q. Did Boston Scientific market the</p> <p>20 Lite product in 2011?</p> <p>21 A. Not domestically, no.</p> <p>22 Q. And when ultimately in the U.S.</p> <p>did</p> <p>23 Boston Scientific market the Lite product?</p> <p>24 A. January 2012. There was some 521</p> <p>1 manufacturing issues that were realized that</p> <p>we</p> <p>2 needed to look at more closely concerning the</p> <p>3 tack weld. Going to the difference in mesh,</p> <p>that</p> <p>4 was another area that we needed to look at</p> <p>more</p> <p>5 closely.</p> <p>6 Q. Was Boston Scientific in a position</p> <p>7 to commercialize and market the light weight</p> <p>mesh</p> <p>8 in the United States in 2008?</p> <p>9 A. No.</p> <p>10 Q. Was Boston Scientific in a position</p> <p>11 to commercialize and market the light</p> <p>weight mesh</p> <p>12 product in 2009?</p> <p>13 A. No.</p> <p>14 Q. Was Boston Scientific in a position</p> <p>15 to commercialize and go to market with the</p> <p>light</p> <p>16 weight product in the United States in 2010?</p> <p>17 A. No.</p> <p>18 Q. Was Boston Scientific in a position</p> <p>19 in 2011 to market and commercialize the</p> <p>light</p> <p>20 weight product?</p> <p>21 A. No.</p> <p>22 Q. When did that ultimately happen?</p> <p>23 A. It ultimately received FDA</p> <p>24 clearance the latter part of 2011, and the 522</p> <p>1 initial launch domestically was completed in</p> <p>2 early 2012.</p>	<p>521:22-522:2</p> <p>FRE 401,</p> <p>402, 403</p> <p>FDA</p>	
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<p>3       Q. You mentioned the manufacturing  4   issues that the light weight mesh presented.  5   What were those?  6       A. Basically the differences in mesh.  7   You've got less surface area with the lighter  8   mesh than there is with the standard mesh,  so  9   that affected the tack weld or the capability  of  10   producing a tack weld within our  specifications.  11   So we were able to achieve a design that was  12   capable for Uphold but more difficult with  the  13   other designs. Ultimately we incorporated  the  14   design change of removing the tack weld  and using  15   the polypropylene loop alone for securing  the two  16   together.</p> <p>17       Q. How long did that process just to  18   solve the manufacturing problems, how long  did  19   that take?</p> <p>20       A. About six months or so.</p> <p>21       Q. In 2008 when you were meeting  with  22   Proxy, did you know whether you could  even  23   manufacture the light weight mesh products  into  24   Uphold, did you know that when you were  sitting</p> <p style="text-align: center;">523</p> <p>1   with them in 2008?</p> <p>2       A. No, we didn't have that depth of  3   knowledge from back in 2008, and I may  have  4   commented earlier that we had the so-called  5   capability, and my perspective on that was at  a  6   high level. The knitting process was there,  and  7   we expected the processes that we had in  place  8   for standard to be -- the standard mesh  product  9   to be very similar, so that from that  perspective</p>	<p>522:2-522:2-  FRE 401,  402, 403</p>	
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<p>10 we had our eyes on the general capability,  but</p> <p>11 there was still a lot to be learned around  design</p> <p>12 and verification and validation thereof.</p> <p>13 Q. If you could look at Exhibit 55.</p> <p>14 And yesterday the plaintiffs' lawyers asked  you</p> <p>15 about the slide that ends in Bates No. 692.</p> <p>16 A. Yes.</p>		
<p>jg032913, (Page 524:10 to 524:23)</p> <p>524</p> <p>10 Q. Does that mesh have a low weight,  11 is that a low weight mesh?</p> <p>12 A. It has low weight, yes, relative to  13 other meshes that were on the market when  that</p> <p>14 was launched, yes.</p> <p>15 Q. Does it have a low surface area,  16 that mesh?</p> <p>17 A. Low surface area again relative to  18 other meshes that were on the market at the  time</p> <p>19 it was launched.</p> <p>20 Q. And does that mesh used in the  21 Pinnacle and Uphold devices, is it large pore  size?</p> <p>23 A. Yes.</p>	524:10-23 FRE 403	
<p>jg032913, (Page 525:2 to 525:22)</p> <p>525</p> <p>2 Q. I want to talk a little bit about  3 weight. At the time that Boston Scientific  began</p> <p>4 marketing Pinnacle and Uphold back in  2008, was</p> <p>5 the mesh that was used in those devices, was  that</p> <p>6 the heaviest mesh that was in a device to  treat</p> <p>7 pelvic organ prolapse?</p> <p>8 A. No, no. The Ethicon or J&amp;J</p> <p>9 product, the Prolift, incorporated the  Gynemesh</p> <p>10 which has a heavier weight that's around 50  grams</p> <p>11 per square meter versus the Polyform mesh  that</p> <p>12 was at 40.</p> <p>13 Q. Would you characterize the mesh  14 that's used in the Pinnacle and Uphold  devices as</p>	525:13-22	

<p>15 a heavy mesh?</p> <p>16 A. No.</p> <p>17 Q. Why not?</p> <p>18 A. No, because the -- that term is</p> <p>19 difficult to use in this because there's always</p> <p>20 that changing target, but relative to where</p> <p>mesh</p> <p>21 have changed over the years, we're</p> <p>definitely in</p> <p>22 that realm of a light weight mesh.</p>	<p>FRE 401, 402, 403, 701, 702</p>	
<p>jg032913, (Pages 526:5 to 527:16)</p> <p>526</p> <p>5 Q. And there's a chart that reflects</p> <p>6 the pore size on the Polyform mesh. Do you</p> <p>see</p> <p>7 that?</p> <p>8 A. Yes.</p> <p>9 Q. And the Polyform mesh is what's</p> <p>10 being designated there as the mesh that's in</p> <p>the</p> <p>11 Uphold and Pinnacle devices?</p> <p>12 A. Yes.</p> <p>13 Q. And it indicates there's a pore</p> <p>14 size of 1400. Do you see that?</p> <p>15 A. I do.</p> <p>16 Q. Is that a large pore size or a</p> <p>17 small pore size?</p> <p>18 A. That is considered a large pore,</p> <p>19 and I reference that back to a publication by</p> <p>a</p> <p>20 Dr. Amid talking about mesh characteristics</p> <p>where</p> <p>21 he was looking at mesh design, whether it</p> <p>has</p> <p>22 monofilament or multifilament and pore</p> <p>size, and</p> <p>23 this -- he was basing that upon what he had</p> <p>seen</p> <p>24 and studied with meshes and how they react,</p> <p>and</p> <p>527</p> <p>1 he characterized the larger pore as being</p> <p>greater</p> <p>2 than 75 microns.</p> <p>3 Q. We saw a reference to pore size in</p> <p>4 the FMEA that the plaintiffs' lawyers asked</p> <p>you</p> <p>5 questions about yesterday. Was pore size</p> <p>6 considered at the research and development</p> <p>stage?</p> <p>7 A. Yes, we have a pore size of greater</p>	<p>BSC has previously designated the same testimony. Plaintiffs adopt and incorporate any objections as set forth in their counter-designations, if any.</p>	<p>Plaintiffs adopt and incorporate their counter designations, if any.</p>

<p>8 than 500 microns indicated in our product  9 specification.</p> <p>10 Q. And why did you set a pore size of  11 greater than 500 microns as part of the  product  12 specification?</p> <p>13 A. It was based partly upon what we  14 had read in the literature and looking to  achieve</p> <p>15 the desired mesh properties overall, so  maintain</p> <p>16 the strength but also a large pore  configuration.</p>		
<p>jg032913, (Pages 529:15 to 530:12)</p> <p style="text-align: center;">529</p> <p>15 Q. She left out the e.g. Can you just  16 read what the e.g. there says in parentheses?</p> <p>17 A. "Graft shrinkage associated with  18 tissue incorporation and pore expansion."</p> <p>19 Q. And in terms of the comment  about</p> <p>20 graft shrinkage in this paragraph of the  patent</p> <p>21 and the other part of the patent, what are  you</p> <p>22 referring to? When you say graft shrinkage  in</p> <p>23 this context, what are you referring to?</p> <p>24 A. The graft shrinkage and my  thoughts</p> <p style="text-align: center;">530</p> <p>1 around that was it's not the polypropylene  2 material or the fiber that's changing its  3 configuration. It's the tissues effect on that,  4 the overall knit structure, that's causing  some</p> <p>5 shapes to be changed.</p> <p>6 Q. And is that consistent with what  7 you've stated in the patent?</p> <p>8 A. Yes.</p> <p>9 Q. And is that consistent with what  10 you've told the ladies and gentlemen of the  jury</p> <p>11 during your deposition over the last two  days?</p> <p>12 A. Yes.</p>		<p>jg032913, (Page 395:16 to  395:23)</p> <p style="text-align: center;">395</p> <p>16 Q. (By Ms. Copeland)  Mr. Goddard, you</p> <p>17 have had an opportunity  now to review Exhibit No.</p> <p>18 61, right?</p> <p>19 A. Yes.</p> <p>20 Q. And this is  some literature. It's</p> <p>21 a study by Dr. Donald  Ostergard, correct?</p> <p>22 MR. ANIELAK:  Object to the form.</p> <p>23 A. It's a summary  of information.</p> <p>jg032913, (Pages 398:23 to  399:3)</p> <p style="text-align: center;">398</p> <p>23 Let me go back to the left-  hand</p> <p>24 side, the bottom. It says,  "In 1998 Klinge</p> <p style="text-align: center;">399</p> <p>1 reported shrinkage of 30  percent to 50 percent</p> <p>2 after four weeks." Do  you see that?</p> <p>3 A. Yes.</p> <p>jg032913, (Page 399:8 to  399:21)</p> <p style="text-align: center;">399</p> <p>8 Do you believe that there's  9 shrinkage associated at  30 percent to 50 percent</p>

10 after four weeks of  
implantation of pelvic mesh  
11 devices?  
12 MR. ANIELAK:  
*Object to the form.*  
13 A. The tissue is  
what's shrinking.  
14 It's not the mesh that's  
shrinking, and I  
15 don't -- from this  
statement we don't know what  
16 product he's talking  
about, so there's not much  
17 information there.  
18 Q. You said  
something interesting. It  
19 is your testimony that the  
mesh doesn't shrink,  
20 that's your testimony?  
21 A. Yes, it's the  
tissue that shrinks

jg032913, (Pages 547:20 to  
550:5)

547

20 Q. And in that  
paragraph I've  
21 highlighted what you  
read. It says -- the last  
22 sentence, the last part of  
the sentence it says,  
23 "e.g. graft shrinkage  
associated with tissue  
24 incorporation and pore  
expansion." Do you

548

1 remember that?  
2 A. Yes.  
3 Q. And the point  
of them having you  
4 read that was so you  
could try to establish that  
5 the mesh itself doesn't  
shrink. That's your  
6 point, that's what you  
think, right?

7 MR. ANIELAK:  
*Form.*

8 A. The  
polypropylene material itself,

9 like the strands, are not  
reducing in length at  
10 all, no.  
11 Q. And that's  
what you believe,  
12 correct?  
13 A. Yes.  
14 Q. All right. But  
what happens is is  
15 the product itself and the  
inflammatory response  
16 caused by your product  
causes the shrinkage,  
17 right, that's what you  
believe?  
18 A. The tissue  
reaction, the way the  
19 tissue forms around the  
mesh can lead to that,  
20 yes.  
21 Q. It can lead to a  
shrinkage of  
22 somewhere between 30  
to 50 percent. Do you  
23 believe that?  
24 MR. ANIELAK:  
Form.

549

1 A. I know that  
there are shrinkage  
2 rates out there. I'm not  
that well acquainted  
3 with them.

4 Q. Well, you've  
seen the literature  
5 that was on the board this  
morning from the  
6 medical literature I think  
that you saw. Do you  
7 recall that?

8 A. I've seen a lot  
of different data.  
9 I don't exactly know the  
numbers but.

10 Q. I will get it  
back out for you, but  
11 the data said 30 to 50  
percent shrinkage, I  
12 believe. Do you recall  
that?

	<p>13                   <b>MR. ANIELAK:</b>  <i>Form.</i></p> <p>14       A. <i>It may be. I      would have to look at      it again.</i></p> <p>16       Q. <i>Do you think      that that presents a      problem for the women      who this is implanted in?</i></p> <p>18       A. <i>I would ask      you to speak to the      medical people more      specifically about that. For      a physician to categorize      if that is a problem      what level of shrinking      would be a problem versus      not.</i></p> <p>23       Q. <i>Does Boston      Scientific care about      that?</i></p> <p style="text-align: right;">550</p> <p>1                   <b>MR. ANIELAK:</b>  <i>Form.</i></p> <p>2       A. <i>We have -- we      recognize that as a      potential complication      and include that in our      instructions for use for      the device, so they      recognize that as an      outcome potentially.</i></p>
jg032913, (Pages 530:13 to 531:12) 530	<p>13 Q. In general when you're involved      14 with designing and developing products like      15 Pinnacle or Uphold, what is the focus, what      are      16 you trying to achieve when you're involved      in      17 that process?</p> <p>18       A. We are listening to the customer,      19 so we're basically getting feedback or input      from      20 physicians on device design, and we are      looking      21 to incorporate what they see as user      interface      22 values in their patient safety aspects into      these</p>

<p>23 designs, and that's evident in the Pinnacle and</p> <p>24 Uphold design where we moved away from this blind</p> <p style="text-align: center;">531</p> <p>1 trocar passage to the single incision Capio. So</p> <p>2 we're offering the customer an option to a 3 surgical procedure looking to incorporate their</p> <p>4 input into that.</p> <p>5 Q. Do you believe that Boston 6 Scientific's devices, the medical devices that 7 you've been involved with like Pinnacle and 8 Uphold and Solyx, are safe?</p> <p>9 A. I do.</p> <p>10 Q. Do you believe that those products 11 are effective options for doctors?</p> <p>12 A. I do.</p>	<p style="text-align: center;">531:5-12</p> <p>FRE 401, 402, 403, 701, 702</p>	
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### 1. Counter Exhibits to Counter Exhibits

- a. Goddard 61
- b. Plaintiffs adopt and incorporate the exhibits designated in their counter designations for this witness.

DATED: July 20, 2015

Respectfully Submitted,

**TRACEY & FOX LAW FIRM**

/s/ Sean Tracey  
 Sean Patrick Tracey  
 State Bar No. 20176500  
 Shawn P. Fox  
 State Bar No. 24040926  
 Clint Casperson  
 State Bar No. 24075561  
 440 Louisiana, Suite 1901  
 Houston, TX 77002  
 (800) 925-7216  
 (866) 709-2333  
[stracey@traceylawfirm.com](mailto:stracey@traceylawfirm.com)  
[sfox@traceylawfirm.com](mailto:sfox@traceylawfirm.com)  
[ccasperon@traceylawfirm.com](mailto:ccasperon@traceylawfirm.com)

/s/ John R. Fabry

John R. Fabry  
Texas Bar No. 06768480  
Mark R. Mueller  
Texas Bar No. 14623500  
MUELLER LAW, PLLC  
404 West 7<sup>th</sup> Street  
Austin, TX 78701  
(512) 478-1236  
(512) 478-1473 (Facsimile)  
[John.Fabry@muelerlaw.com](mailto:John.Fabry@muelerlaw.com)  
[Mark@muelerlaw.com](mailto:Mark@muelerlaw.com)  
[Meshservice@muelerlaw.com](mailto:Meshservice@muelerlaw.com)

**CERTIFICATE OF SERVICE**

I hereby certify that on July 20, 2015, I electronically filed the foregoing document with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the CM/ECF participants registered to receive service in this MDL.

**TRACEY & FOX LAW FIRM**

/s/ Sean Tracey  
Sean Patrick Tracey  
State Bar No. 2176500  
Shawn P. Fox  
Clint Casperson  
State Bar No. 24075561  
State Bar No. 24040926  
440 Louisiana, Suite 1901  
Houston, TX 77002  
(800) 925-7216  
(866) 709-2333  
[stracey@traceylawfirm.com](mailto:stracey@traceylawfirm.com)  
[sfox@traceylawfirm.com](mailto:sfox@traceylawfirm.com)  
[ccasperon@traceylawfirm.com](mailto:ccasperon@traceylawfirm.com)

/s/ John R. Fabry  
John R. Fabry  
Texas Bar No. 06768480  
Mark R. Mueller  
Texas Bar No. 14623500  
MUELLER LAW, PLLC  
404 West 7<sup>th</sup> Street  
Austin, TX 78701  
(512) 478-1236  
(512) 478-1473 (Facsimile)  
[John.Fabry@mullerlaw.com](mailto:John.Fabry@mullerlaw.com)  
[Mark@mullerlaw.com](mailto:Mark@mullerlaw.com)  
[Meshservice@mullerlaw.com](mailto:Meshservice@mullerlaw.com)